

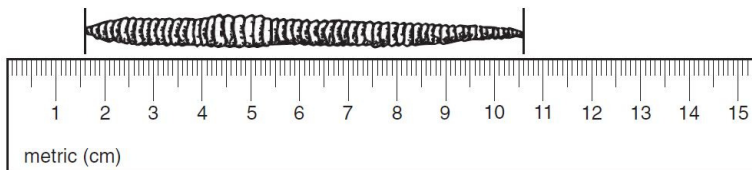
Name \_\_\_\_\_

## Keystone Warm-ups Chapter 1

*Copy down all 4 answer choices for the daily warm-up from the board in the space below its question. Choose the best answer by circling its letter. Then, after we go over it, write the correct answer in the block provided on the front of the packet.*

1	<input type="text"/>	2	<input type="text"/>	3	<input type="text"/>	4	<input type="text"/>
5	<input type="text"/>	6	<input type="text"/>	7	<input type="text"/>	8	<input type="text"/>

1. What is the approximate length of the earthworm shown in the diagram below?



- (A) 9 mm                      (B) 90 mm                      (C) 10.6 cm                      (D) 106 cm

2. The data table below shows an effect of secondhand smoke on the birth weight of babies born to husbands and wives living together during pregnancy.

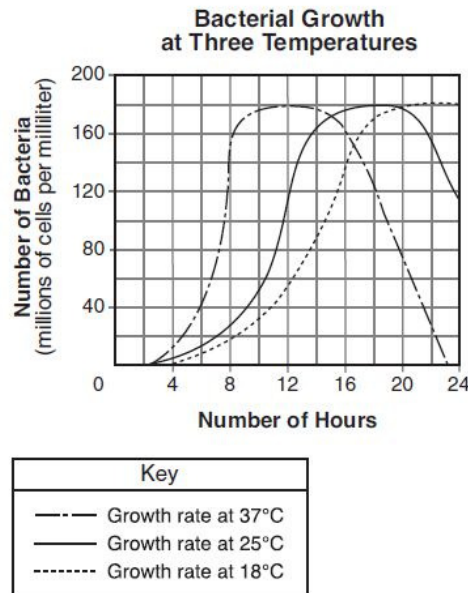
**Effect of Secondhand Smoke on Birth Weight**

	Wife: Nonsmoker Husband: Nonsmoker	Wife: Nonsmoker Husband: Smoker
Number of Couples	837	529
Average Weight of Baby at Birth	3.2 kg	2.9 kg

Based on these data, a reasonable conclusion that can be drawn about secondhand smoke during pregnancy is that secondhand smoke

- (A) is unable to pass from the mother to the fetus  
(B) slows the growth of the fetus  
(C) causes mutations in cells of the ovaries  
(D) blocks the receptors on antibody cells

3. The graph below represents the growth of bacteria cultured at three different temperatures over a period of 24 hours.



3. What conclusion concerning the rate of cell division in the bacteria culture is correct?

- (A) Cell division is most rapid at 37°C between 6 and 8 hours after it began.
- (B) Cell division is most rapid at 25°C between 20 and 24 hours after it began.
- (C) Cell division is most rapid at 18°C between 4 and 8 hours after it began.
- (D) Cell division occurs at the same rate no matter what the temperature.

4. Students were asked to determine if they could squeeze a clothespin more times in a minute after resting than after exercising. An experiment that accurately tests this question should include all of the following except

- (A) a hypothesis on which to base the design of the experiment
- (B) a large number of students
- (C) two sets of clothespins, one that is easy to open and one that is more difficult
- (D) a control group and an experimental group with students of similar ages

5. An experiment was carried out to determine whether drinking caffeinated soda increases pulse rate. The pulse rates of two groups of people at rest were measured. Group A was then given caffeinated soda and group B was given caffeine-free soda. One hour after drinking the soda, the pulse rates were measured. The participants in the experiment were all the same age, and they were all given the same amount of soda.

The dependent variable in this experiment is the

- (A) type of soda given to each group
- (B) amount of soda given to each group
- (C) pulse rate of each group
- (D) age of participants in each group

6. Which statement best describes a controlled experiment?

- (A) It eliminates the need for dependent variables.
- (B) It shows the effect of a dependent variable on an independent variable.
- (C) It avoids the use of variables.
- (D) It tests the effect of a single independent variable.

7. When a certain plant is without water for an extended period of time, guard cells close openings in the leaves of the plant. This activity conserves water and illustrates

- (A) cellular communication involving the action of nerve cells and receptor sites
- (B) an increase in rate of growth due to a low concentration of water
- (C) maintenance of a dynamic equilibrium through detection and response to stimuli
- (D) a response to one biotic factor in the environment

8. Which situation indicates that a disruption of homeostasis has taken place?

- (A) the presence of hormones that keep the blood sugar level steady
- (B) the maintenance of a constant body temperature
- (C) cell division that is involved in normal growth
- (D) a rapid rise in the number of red blood cells